CERTIFICATION

I, William J. Pennington, III do hereby certify;

That my qualifications in telecommunications matters are of record before the Federal Communications Commission having been presented and accepted on many occasions in the past;

That I am a consultant in technical topics pertaining to the broadcast industry and the associated RF transmission systems;

That I have been retained by Urban Network Communications to perform certain technical studies and prepare this report of same;

That the accompanying technical report and exhibits were prepared by me personally or under my immediate personal supervision and that all information presented therein is true and correct of my knowledge and belief.

/S/ _____
William J. Pennington, III

(Date) 8/22/91

INTRODUCTION

The engineering statement, attached data and exhibits supply the necessary information for filing an application for a construction permit for a new FM Broadcast Station on Channel 265A, 100.9 mHz., at Richwood, Louisiana.

PROPOSED OPERATING SPECIFICATIONS

The proposed facility will operate with an effective radiated power of 3.30 kilowatts at 136 meters above the average terrain on FM Channel 265A, 100.9 mHz.. Exhibit E-1 is a sketch of the existing structure on which the applicant proposes to locate its antenna.

SITE SPECIFICATIONS

The location of the proposed transmitting site described herein complies with all separation requirements of Section 73.207 of the Commission's Rules. Accompanying Exhibit E-6 is a current spacing study confirming the specific separations and clearances involved.

INTERFERENCE CONSIDERATIONS

There are no broadcast stations, existing or proposed, within 10 kilometers of the site proposed herein which would produce receiver-induced intermodulation interference. There is presently an unbuilt construction permit, (Channel 208A, 1.00 KW, 121 meters above the average terrain, BPED900730MF), which has as an antenna site, the same existing tower on which Urban Network Communications proposes to mount its antenna. Urban Network

Communications proposes to locate its antenna at a point 136 meters above the average terrain. The two antennas would be located more than a sufficient distance apart so not to create interference with one another. The applicant will employ such measures as necessary to assure operation in accordance with Section 73.317 of the Commission's Rules. The distance to the 115 dBu "blanketing contour" for 3.30 KW operation is 0.72 kilometers, as calculated in accordance with Section 73.318 of the Commission's Rules. This calculation is included as Exhibit E-5. The applicant recognizes and accepts the responsibility to investigate and attempt to resolve interference complaints within the blanketing contour caused by the proposed operation as outlined in Section 73.318 to both populated areas and existing communications facilities, using whatever practical methods necessary.

FAA AND ENVIRONMENTAL CONSIDERATIONS

A grant of this application would not cause any significant environmental impact. No Environmental Assessment is included in this report. This site is not located in any officially designated wilderness area, officially designated wildlife preserve, or floodplain. The facilities would not affect any buildings, sites, structures, or districts concerning American History, architecture, archaeology or culture as listed in the National Register of Historic Places. On the proposed site is currently located an existing 518 foot (Above Ground Level) tower. No major changes in the surface features or land contours

will occur during construction.

An FAA form 7460/1 has been filed with the Southwest Regional Office of the Federal Aviation Administration in Fort Worth. A copy of this filing is attached as Exhibit E-4.

The proposed site is zoned properly. An existing tower is currently located at the proposed antenna site. The applicant knows of no controversies surrounding the implementation of this proposal.

PROPOSED SITE LOCATION

Exhibit E-2 is a full size color laser photocopy of the northeast portion of the West Monroe South Quadrangle 7.5 minute United States Geological Survey topographic map showing the proposed site location with the original terrain contours, latitude and longitude markings and other information requested by Instruction V in Section V-B of FCC Form 301. A full scale complete West Monroe South Quadrangle has been provided to the Commission's Staff in compliance with the current policy regarding site maps.

PREDICTED COVERAGE CONTOURS

Exhibit E-3 is a full scale color laser photocopy of the Memphis 1:500,000 scale Aeronautical Sectional Chart, showing the proposed site, radials used for terrain analysis and contour predictions, the 3.16 mV/m and 1.0 mV/m contours, Richwood, LA city limits and original latitude and longitude markings. Terrain data and predicted contour distances for 9 radials, including the eight cardinal radials used in calculating the

height above the average terrain, and the radial through the city of license, were taken from the NGDC 30 second database. The proposed site and antenna height provide line of sight coverage of the complete community of license The proposed 3.16 mV/m service contours completely encompasses the community of license.

POPULATION AND AREA DATA

The population data in this application was obtained from Broadcast Data Services computerized database listing the 1980 United States Census, the corrected 1980 census and the 1986 census update. The area within the predicted 1.0 mV/m service contour used the same computer database and was determined by a computerized integration program.

RADIO FREQUENCY RADIATION COMPLIANCE

During preparation of this proposal attention was given to the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. Sections 4321-4361 and to the Commission's Report and Order in General Docket Number 79-144, 100 F.C.C. 2d 543 (1985). Since the applicant proposes to use an existing tower on which another broadcast station has been permitted to use, close attention was paid to OST Bulletin Number 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation". The output power and height of the permitted new educational FM facility on Channel 208A was factored in along with the proposed facility to determine if the applicant's new service would exceed minimum's set forth in OST Bulletin Number 65. It was determined that with the addition of the proposed

service the parameters would easily be met and the applicant's proposed antenna could be located on the existing tower. Suitable procedures will be employed when workers are at the tower site to service equipment. Most service work will be completed at a time when the station will be off the air, so as to limit any radiation hazard to employees. The proposed transmitter site is located in a remote area, away from the public, and will be secured so as to only allow access to authorized station personnel.

The applicant assumes that this proposal would create no significant effect on the human environment with regard to exposure to the general public.

AUXILIARY POWER

The applicant proposes to install auxiliary power generators at the studio and transmitter facilities to insure no interruption of service in the event of a commercial power failure.

CONCLUSION

Based on the accompanying technical information, we trust that this proposal complies with the requirements set forth in the Commission's Rules and Regulations. If any additional information is requested, please do not hesitate to contact this office.

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Barbara Dawson-Monk d/b/a Urban Network Communications

Call letters *(if issued)*	Is this application being filed in response to a window? [XXX] Yes [ ] No If Yes, specify closing date: 8/25/91. Since 8/25/91 falls on a Sunday window extended to 8/26/91
New	

Purpose of Application: *(check appropriate box(es))*

- [XXX] Construct a new (main) facility
- [ ] Construct a new auxiliary facility
- [ ] Modify existing construction permit for main facility
- [ ] Modify existing construction permit for auxiliary facility
- [ ] Modify licensed main facility
- [ ] Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- [ ] Antenna supporting-structure height
- [ ] Effective radiated power
- [ ] Antenna height above average terrain
- [ ] Frequency
- [ ] Antenna location
- [ ] Class
- [ ] Main Studio location
- [ ] Other *(Summarize briefly)*

File Number(s) _____

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
265	Richwood	Ouachita	LA

Class *(check only one box below)*

[XXX] A [ ] B1 [ ] B [ ] C3 [ ] C2 [ ] C1 [ ] C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark. 0.62 miles west of State Route 3033. 0.83 miles south of State Route 838 Just southwest of Siegle community.

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	32°	28'	38"	Longitude	92°	11'	08"

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? [XXX] Yes [ ] No

If Yes, give call letter(s) or file number(s) or both. BPED 900730MF

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. No change of existing height of structure.

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☒ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No. E-4

Date August 24, 1991 Office where filed Southwest Regional Office, Fort Worth, Texas

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	NONE		
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 29 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 158 meters

(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)] 187 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 137 meters (H)

137 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)] 166 meters (H)

166 meters (V)

(3) above average terrain 136 meters (H)

136 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. E-1

9. Effective Radiated Power:
(a) ERP in the horizontal plane 3.30 kw (H*) 3.30 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No. DNA

_____ kw (H*) _____ kw (V*)

*Polarization

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 3)

10. Is a directional antenna proposed? ☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field. Exhibit No. DNA

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)? ☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service. Exhibit No. DNA

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal? ☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No. DNA

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207? ☒ Yes ☐ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply? DNA ☐ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers. Exhibit No. DNA

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No. DNA

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: Exhibit No. DNA

(1) Protected and interfering contours, in all directions (360°), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? ☒ Yes ☐ No See Exhibit E-1 & Engineering Discussion

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)* Exhibit No. See Exhibit E-1 & Engineering Discussion

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. E-2

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. E-3

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 2532.1 sq. km. Population 150,231 (1986 Update) 143,252 (1980 Census) 143,249 (1980 Corrected)

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. DNA

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: NGDC)

☐ Other *(briefly summarize)*

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
112 *	149	16.9	29.6
0	137	16.3	28.6
45	148	16.9	29.5
90	149	17.0	29.6
135	149	17.0	29.7
180	138	16.3	28.6
225	127	15.7	27.6
270	116	15.1	26.4
315	124	15.6	27.3

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. DNA

If No, explain briefly why not.

SEE ENGINEERING DISCUSSION

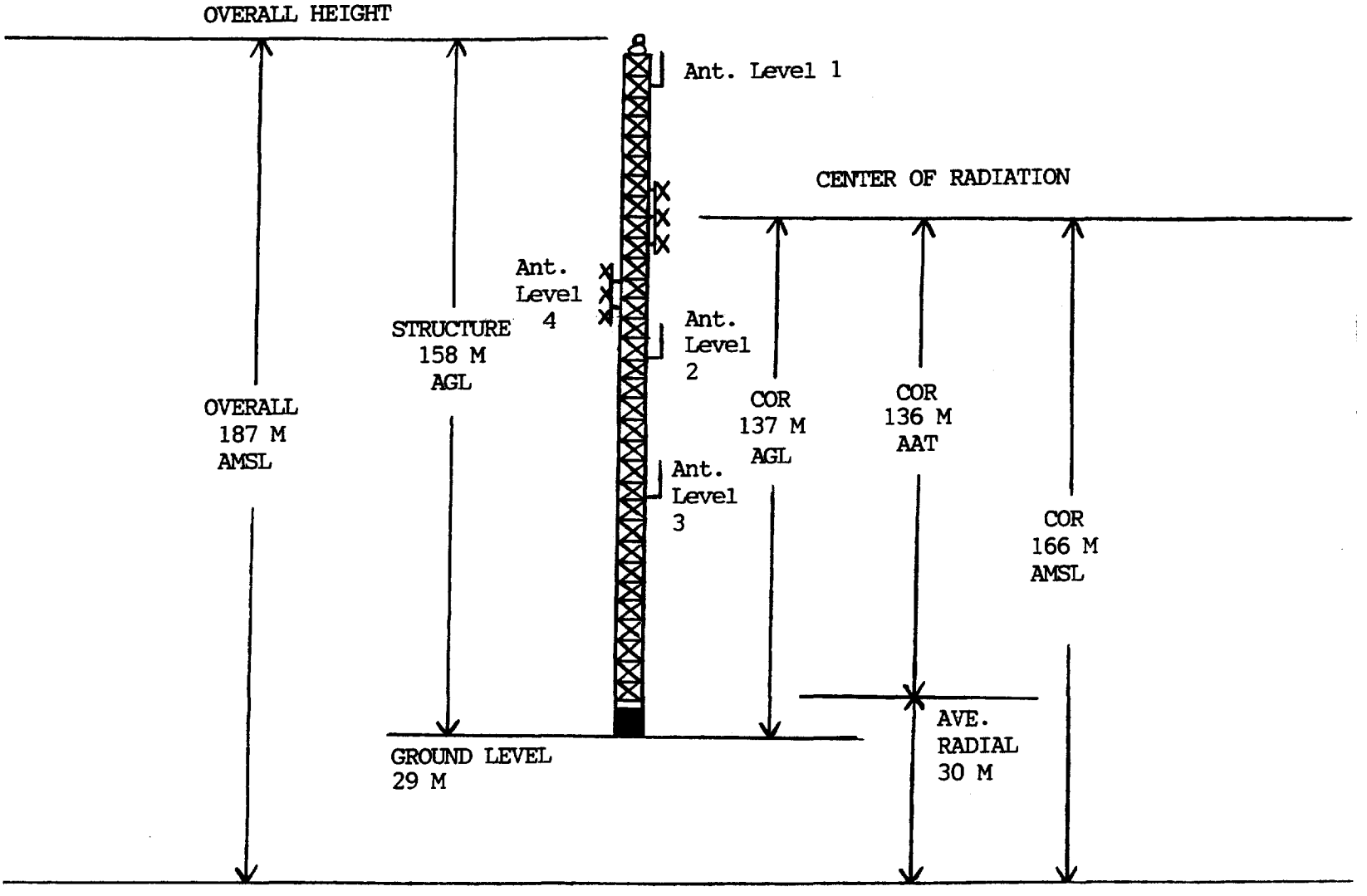
CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
William J. Pennington, III	Technical Consultant
Signature	Address *(Include ZIP Code)*
	2426 Confederate Drive Wilmington, NC 28403
Date	Telephone No. *(Include Area Code)*
August 22, 1991	(919) 762-7897

EXHIBIT E-1

ANTENNA VERTICAL SKETCH



NOTE: NOT TO SCALE
TOWER IS GUYED
TOWER IS LIGHTED AS PER FAA SPECIFICATIONS.

Antenna Level 1
WNQN 963, 155.595, 157 meters
WNFR 476, 152.480, 157 meters
WNNW 504, 155.175, 157 meters
KNOQ 918, 156.210, 157 meters

Antenna Level 2
WNJF, 461.075, 104 meters

Antenna Level 3
KS1981, 155.130, 61 meters

Antenna Level 4
New CP, 89.5 mHz, 121 mete

WEST MONROE SOUTH QUADRANGLE
LOUISIANA—OUACHITA PARISH
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 MONROE SOUTH 15' QUADRANGLE

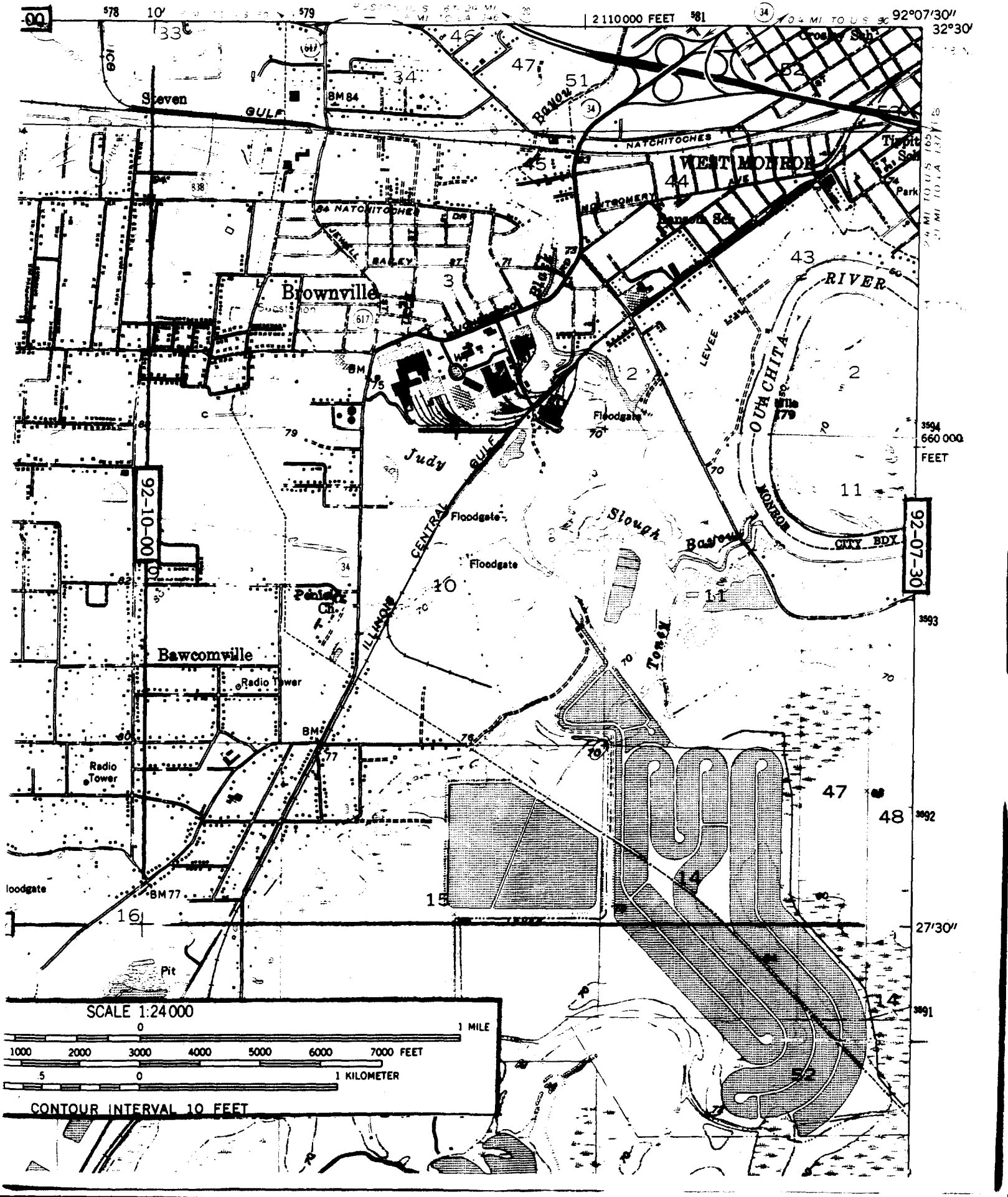
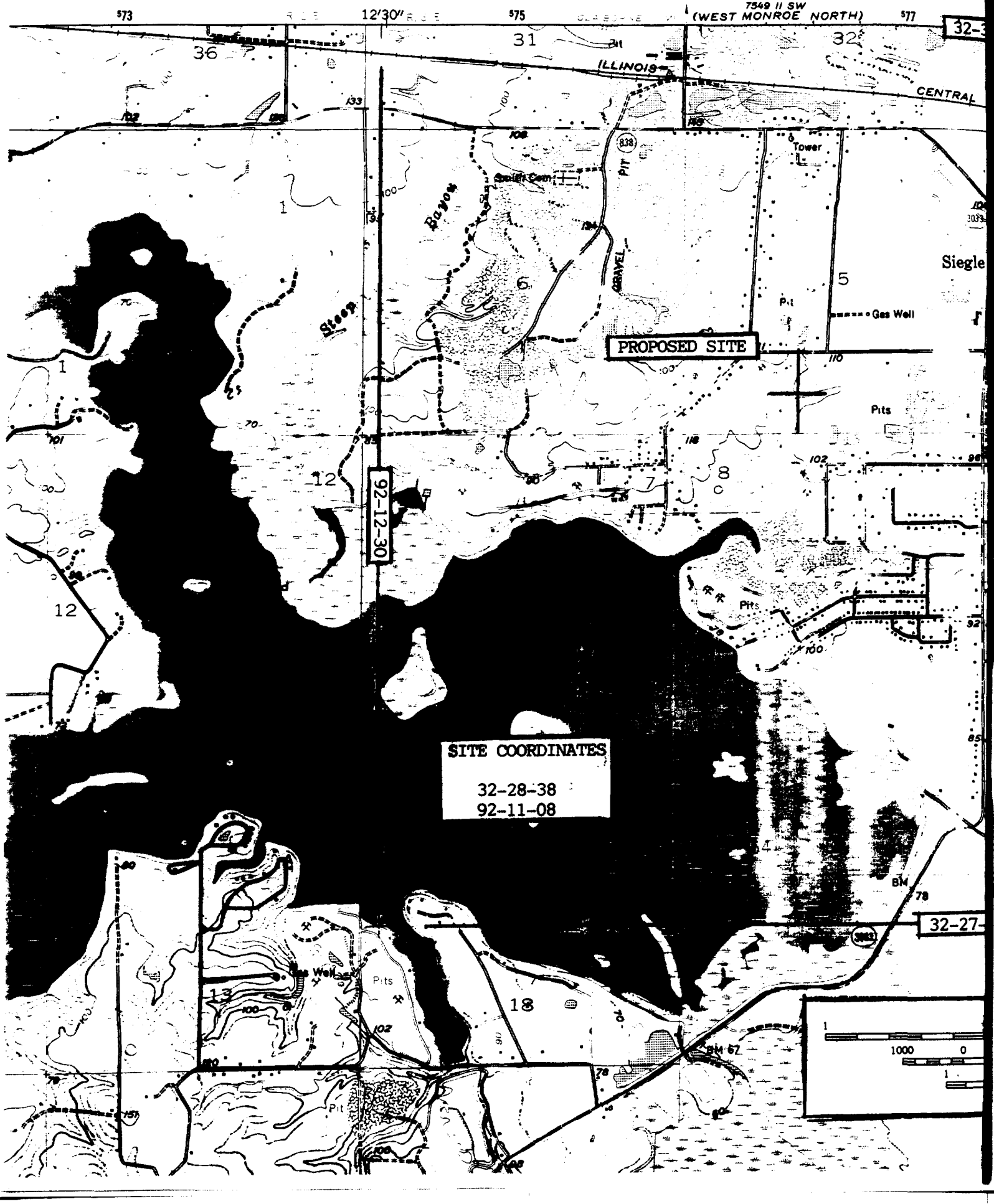
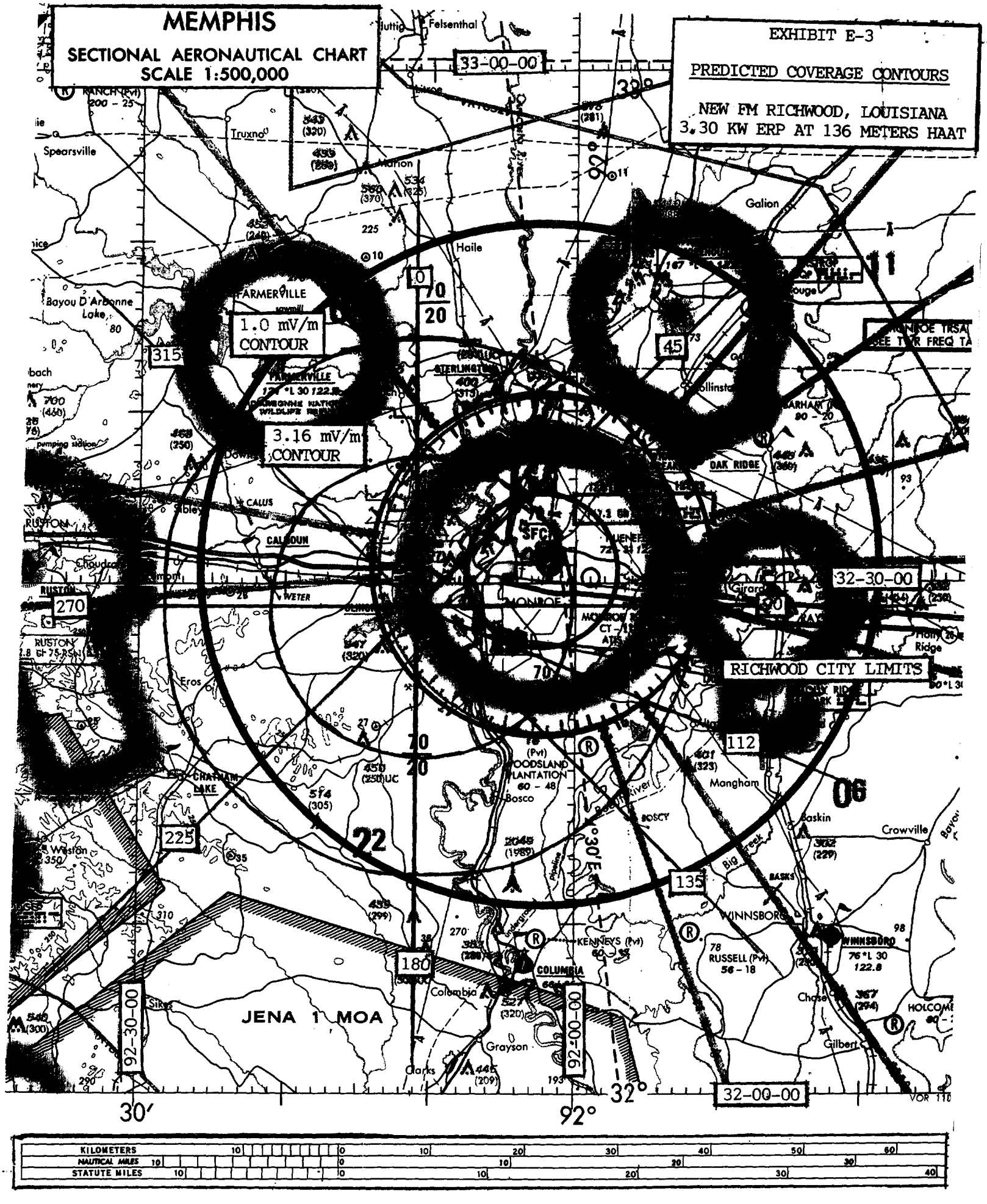


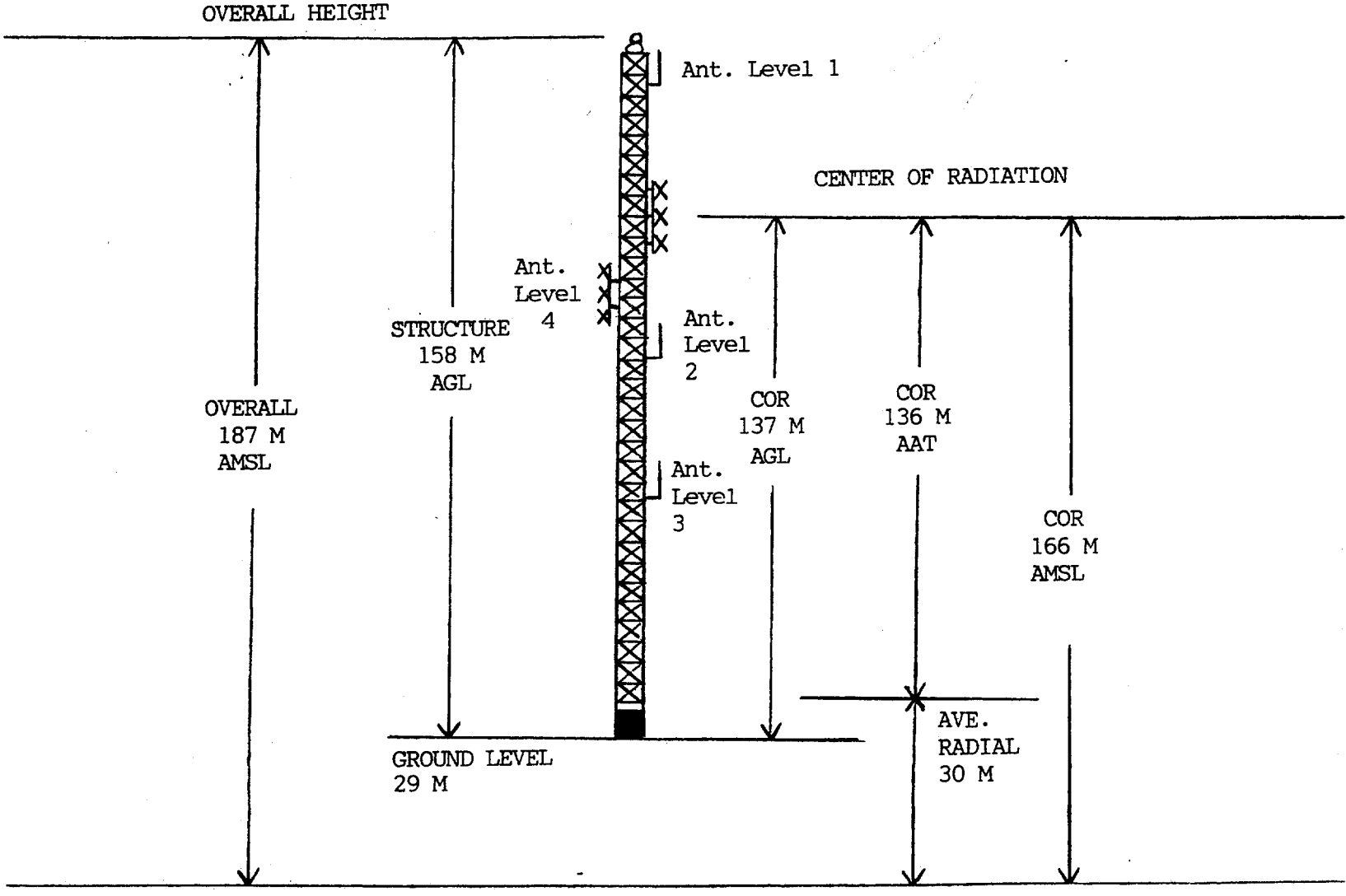
EXHIBIT E-2

VICINITY OF SITE




MEMPHIS
SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000
EXHIBIT E-3
PREDICTED COVERAGE CONTOURS
NEW FM RICHWOOD, LOUISIANA
3.30 KW ERP AT 136 METERS HAAT
1.0 mV/m CONTOUR
3.16 mV/m CONTOUR
RICHWOOD CITY LIMITS
JENA 1 MOA
33-00-00
32-30-00
32-00-00
92-30-00
92-00-00
30'
92°
32°
Spearsville
Truxno
Marion
Haile
Galion
Bayou D'Arbonne Lake
FARMERVILLE
STERLINGTON
DAK RIDGE
CALHOUN
RUSTON
MONROE
Girard
Eros
CRAWFORD LAKE
Bosco
Mangham
Baskin
Crowville
WINNSBORO
KENNEYS (Pvt)
COLUMBIA
RUSSELL (Pvt)
Colombia
Grayson
Clarks
Chase
Gilbert
315
45
270
225
135
180
112
KILOMETERS
NAUTICAL MILES
STATUTE MILES

ANTENNA VERTICAL SKETCH



NOTE: NOT TO SCALE
TOWER IS GUYED
TOWER IS LIGHTED AS PER FAA SPECIFICATIONS.

Antenna Level 1
WNQN 963, 155.595, 157 meters
WNFR 476, 152.480, 157 meters
WNNW 504, 155.175, 157 meters
KNOQ 918, 156.210, 157 meters

Antenna Level 2
WNJF, 461.075, 104 meters

Antenna Level 3
KS1981, 155.130, 61 meters

Antenna Level 4
New CP, 89.5 mHz, 121 met

☆U.S. GOVERNMENT PRINTING OFFICE: 1997—761-910

DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
☐ New Construction	☒ Permanent	Beginning Upon CP grant
☒ Alteration	☐ Temporary (Duration _____ months)	End within 6 mos.

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

Station will operate on 100.9 mHz. Power will be 3.30 kilowatts.

Station will use a 3 bay antenna side mounted on an existing tower at this site. Station will use $1\frac{5}{8}$ inch transmission line.

Map is attached showing vertical plan of existing structure and its relationship to the nearest runway.

(If more space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. *(Number, Street, City, State and Zip Code)*

(318) 388-3224
area code Telephone Number

BABARA DAWSON-MONK
URBAN NETWORK COMMUNICATIONS
POST OFFICE BOX 193
MONROE, LA 71210-0193

B. Name, address and telephone number of proponent's representative if different than 3 above.

WILLIAM J. PENNINGTON, III
2426 CONFEDERATE DRIVE
WILMINGTON, NC 28403

4. Location of Structure

A. Coordinates *(To nearest second)*	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flightpark, or seaplane base	5. Height and Elevation *(Complete to the nearest foot)*	
	Brownville, LA	Monroe Regional	A. Elevation of site above mean sea level	95'
32° 28' 38" Latitude	(1) Distance to 4B 1.9 Miles	(1) Distance from structure to nearest point of nearest runway 8.8 miles	B. Height of Structure including all appurtenances and lighting *(if any)* above ground, or water if so situated	518'
92° 11' 08" Longitude	(2) Direction to 4B East	(2) Direction from structure to airport ENE	C. Overall height above mean sea level *(A + B)*	613'

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). *(If more space is required, continue on a separate sheet of paper and attach to this notice.)*

0.62 miles west of State Route 3033, 0.83 miles south of State Route 838, just southwest of Siegle community.

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature
8/21/91	William J. Pennington, III Technical Consultant	

EXHIBIT E-5

FM BLANKETING CONTOUR CALCULATION

The blanketing contour of the proposed New FM operation is determined using the following formula as defined in 73.318 of the Commission's Rules:

D=0.394	*SQR(P)
where	D=distance to blanketing contour in KM
	P=ERP in KW of the station

The ERP of the proposed NEW FM operation is 3.30 KW, yielding a blanketing contour of 0.72 kilometers from the tower.

While is is the experience of this firm that very little, if any blanketing interference will be experienced by the grant of this proposal KDBB will follow the guidelines of 73.318 and good engineering practice to satisfy blanketing complaints.

EXHIBIT E-6

ALLOCATION STUDY

32 28 38 N. Class A Search Date
92 11 8 W. Current rules spacings 08-17-91
Channel 265A -100.9 MHz

Call	Ch#	City	State	Bear'	Dist'	R'qrd	Margin	
>ALOPEN	265A	Richwood	LA	112.2	10.94	115.0	-104.06	*
KRMDFM	266C	Shreveport	LA	278.0	165.72	165.0	0.72	*
KEDM.C	212C1	Monroe	LA	41.9	27.33	22.0	5.33	*
WDMS	264C1	Greenville	MS	45.9	150.66	133.0	17.66	
KMES.C	266A	Jonesville	LA	157.7	106.71	72.0	34.71	
WBBV	266A	Vicksburg	MS	95.9	127.66	72.0	55.66	
>ALOPEN	265C3	Hazlehurst	MS	110.7	201.92	142.0	59.92	
WMDCFM	265A	Hazlehurst	MS	111.1	180.23	115.0	65.23	
KRRVFM	262C	Alexandria	LA	190.6	162.91	95.0	67.91	

Command _____